

Decom Business Models

Where are we heading?



A view of Vermont Yankee from the air.
REFORMER FILE PHOTO

Vermont Yankee sale to NorthStar completed

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By Susan Smallheer, Brattleboro Reformer

VERNON — In the end, Vermont Yankee nuclear power plant sold for a symbolic and nominal \$1,000.

Plus its \$506 million decommissioning trust fund.

USA Nuclear Decommissioning | A Change in Perspective

From

Billions of liability

A traditional
service contract

Delayed decom

60 years of activity

A project by project
approach



To

Billions of revenue

Permanent license
(& liability) transfer

Accelerated decom

<10 years of activity

A fleet management
approach

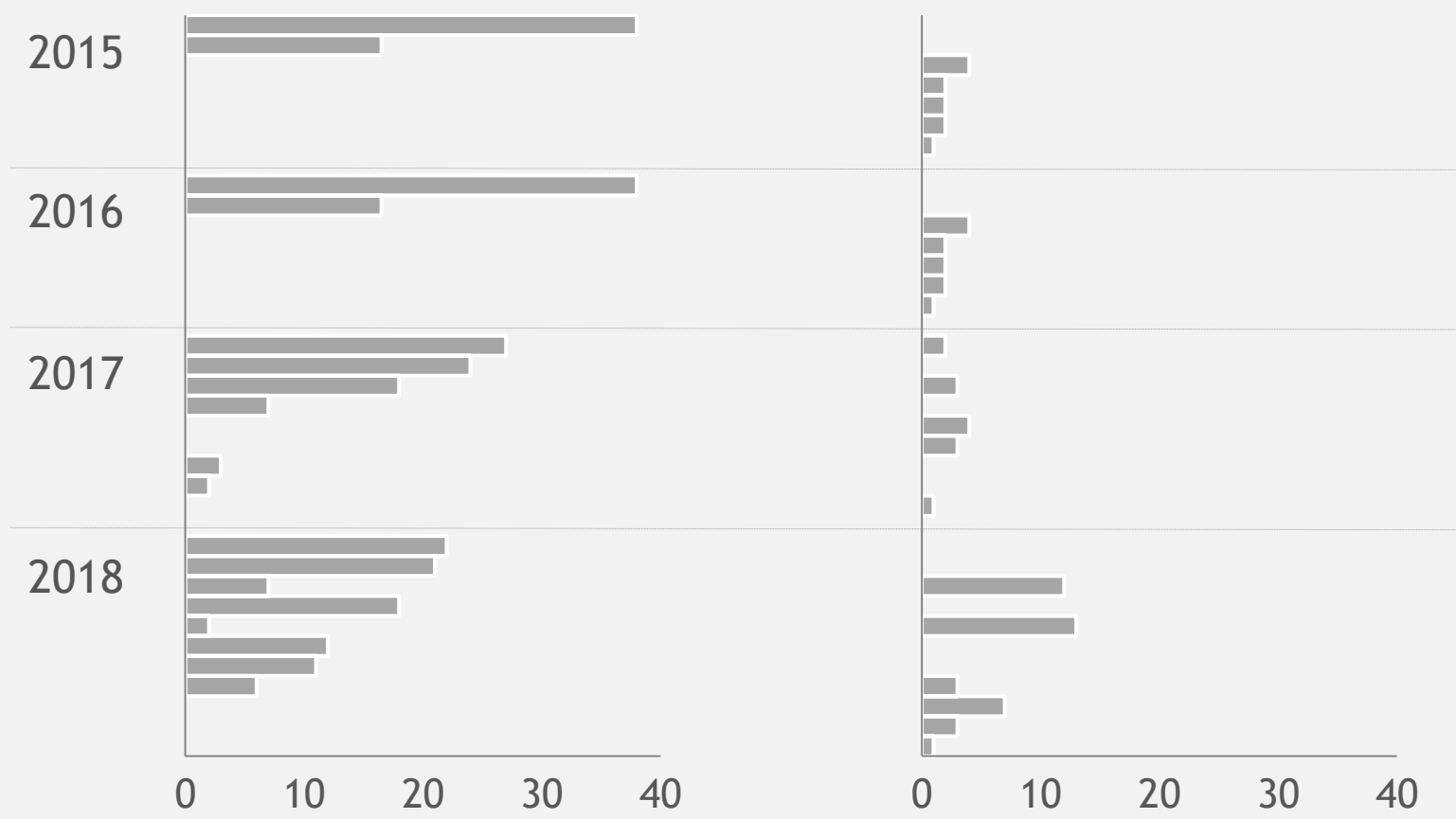
UK Offshore Well P&A

Much Activity Is Fragmented

Platform Wells,



Subsea Wells,



Note. Each horizontal line represents an operator's well P&A activity in year
Source: OGA

Campaign Design

Region

Sub-region

Country

Company

Operatorship

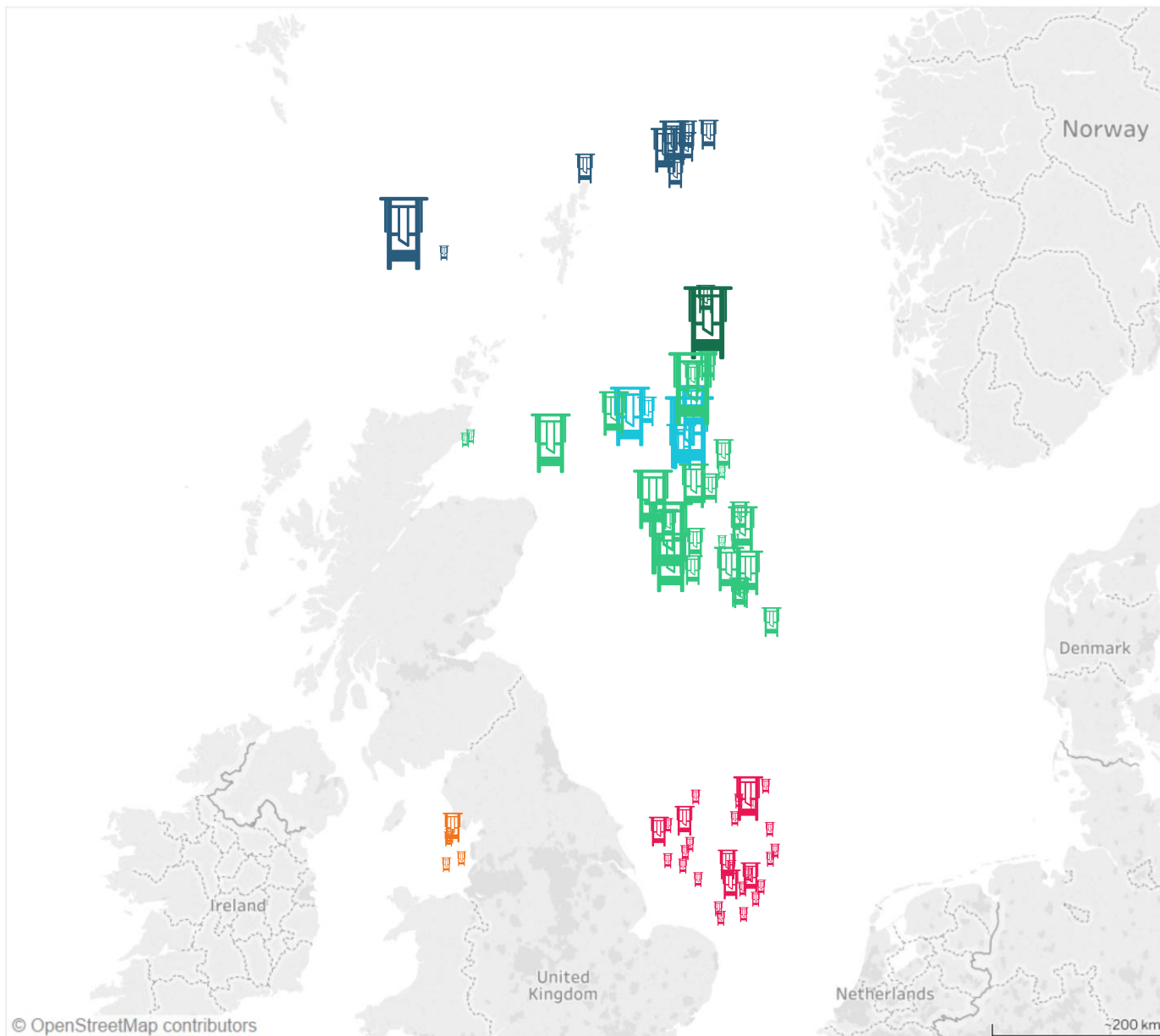
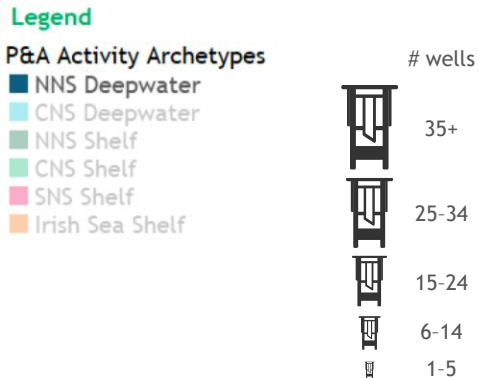
Period of Decom Activity
 2019 2030

Removal Activity Archetype

P&A Activity Archetype

Display Choices

Color By

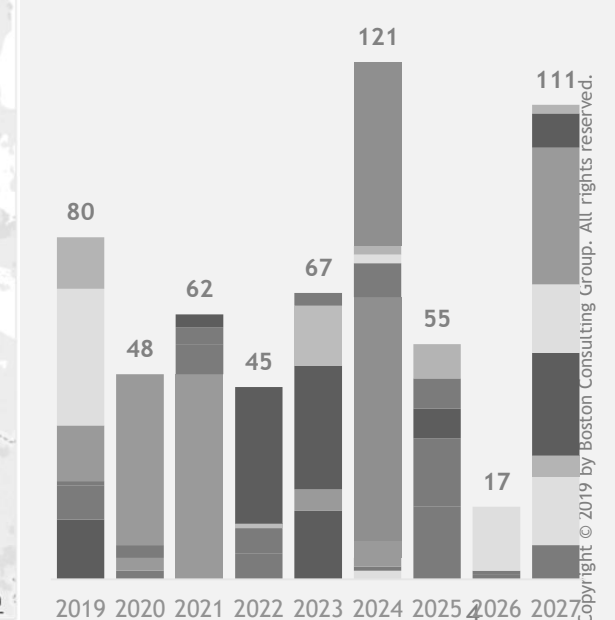


Well P&A	Substructures Removal	Pipelines Removal
Topsides Removal	Subsea Kit Removal	End to End Decom

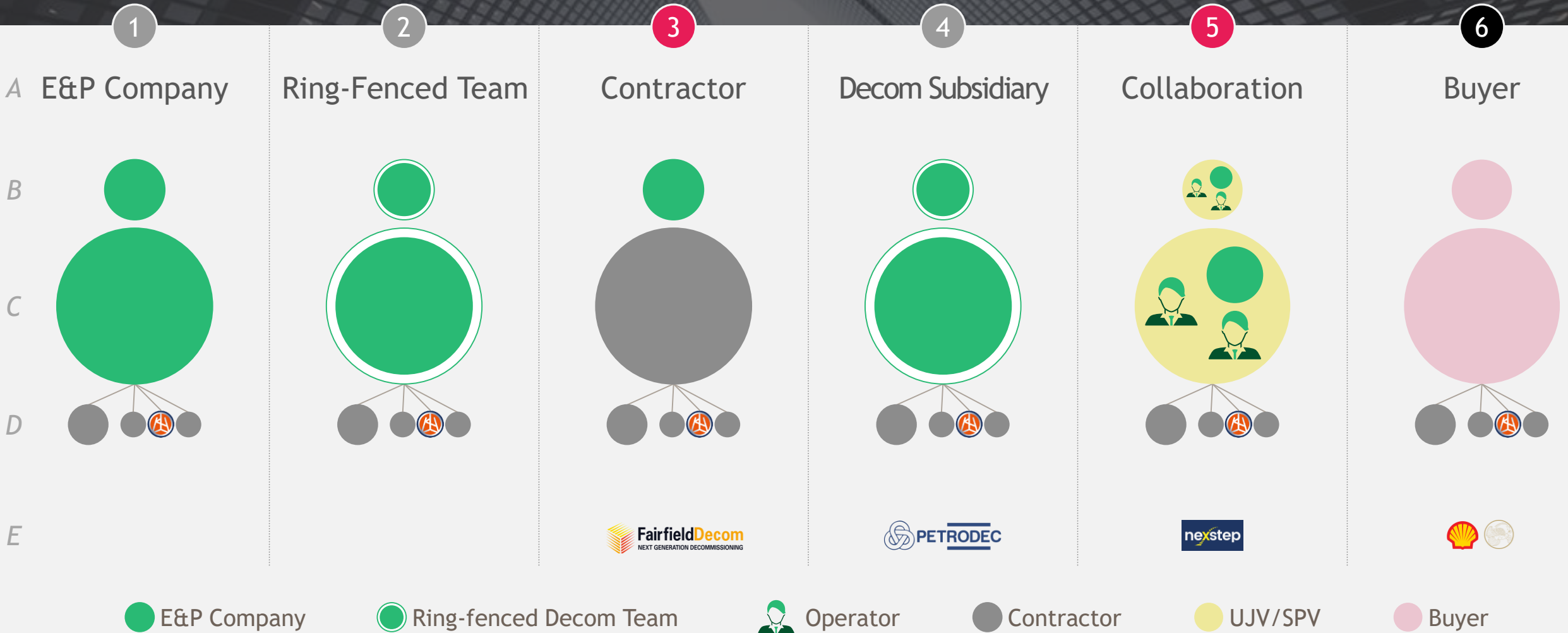
	Estimated Spend, \$M	Wells, #
NNS Deepwater	1,500	100
CNS Deepwater	1,400	100
NNS Shelf	500	50
CNS Shelf	5,300	400
SNS Shelf	800	100
Irish Sea	100	<50

Well P&A Activity Timeline

Wells



We Need Innovative Models To Decom At Scale



We evaluated each model across five criteria



Risked Value
Potential



Strategic
Rationale



Control &
Optionality



Risk
Exposure



Effort &
Timeline
to Setup

How do these models compare?

Risked Value Potential



E&P-focus; No Distinctive Decom Capability

Distinctive Decom Capability

Strategic Rationale



Control & Optionality



Risk Exposure



Effort & Timeline to Setup



1 E&P Company 2 Ring-Fenced Team 3 Contractor 4 Decom Subsidiary 5 Collaboration 6 Buyer

Note: Example analysis with a leading operator in the North Sea. Model names refer to entity who operates

UK O&G decommissioning | Where do we need to head?

From

Excellent projects but fragmented activity

Non-specialist teams and equipment

An organizational context not adapted to decom



To

Incentives to decommission at scale

Executive level partnerships between operators and specialist contractors

Investment to develop fit for purpose capability

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